

SECTION 11172

WASTE COMPACTORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

1.2 SUMMARY

- A. This Section includes waste compactors, component fittings, and accessories.
- B. Related Sections:
 - 1. Electrical wiring and connections for waste compactors: Division 16

1.3 SUBMITTALS

- A. Product data for each type of waste compactor specified, including installation instructions for each principal component. Provide shipping, installed, and operating weights.
 - 1. Provide manufacturer's performance data sheets that indicate the compactor's NSWMA base size and normal and maximum system pressure, packing force, and force rating of each waste compactor specified. Include certified test reports on operation.
- B. Shop drawings from the manufacturer detailing waste compactor fabrication and installation. Include plans, elevations, and large-scale details showing the layout and types of each item of equipment required, including components, and accessories.
 - 1. Show rough-in dimensions, service connection details, and the location of field connections.
 - 2. Show required clearances for equipment service and operation.
 - 3. Include setting drawings, templates, and directions for installing anchor bolts and other anchorages to be installed as a unit of Work under other Sections.
- C. Wiring diagrams detailing wiring for power and control systems differentiating clearly between manufacturer-installed wiring and field-installed wiring.
- D. Maintenance data for each waste compactor to include in the "Operating and Maintenance Manual". Include operating and maintenance instructions, parts list, parts inventory list, purchase source for operational and maintenance materials, emergency instructions and similar information. Include name, address, and telephone number of the manufacturer's nearest service representative.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who is an authorized representative of the waste compactor manufacturer for both the installation and maintenance of the type of equipment required for this Project.
 - 1. Maintenance Proximity: Not more than 2 hours normal travel time from the Installer's place of business to the Project site.
- B. Manufacturer Qualifications: Firm experienced in manufacturing waste compactors similar to those indicated for this Project and that have a record of successful in-service performance.
- C. Electrical Component Standard: Provide components that comply with NFPA 70 "National Electrical Code" and are listed and labeled by UL.
- D. Waste Compactor Standards: Comply with applicable requirements of ANSI Z245.1, "Safety Requirements for Refuse Collection and Compaction Equipment," and NFPA 82, "Incinerators, Waste and Linen Handling Systems and Equipment."

1. NSF Standards: Comply with National Sanitation Foundation Standard No. 13 "Refuse Compactors and Compactor Systems."
 - A. Provide waste compactor units labeled with NSF Seal.
- E. The Drawings indicate the size, profiles, and dimensional requirements of waste compactor based on the specific type. Components by other manufacturers may be considered provided deviations in dimensions and profiles are minor and do not change the design concept as judged by the CM.

1.5 MAINTENANCE SERVICE

- A. Maintenance: Starting at date of Substantial Completion, provide full maintenance of compactors for 3 months on a weekly surveillance basis, followed by 9 months on a monthly surveillance basis. Correct operational imperfections and restore or replace defective or deteriorated components and finishes. Use only genuine parts, components, and supplies as used in the manufacture and installation of original equipment.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer: Subject to compliance with requirements, provide products by one of the following manufacturers:
 1. Bes-Pac, Inc.
 2. Chicago Trashpacker, Corp.
 3. Kohlman Engineering
 4. Marathon Equipment Company.
 5. Precision Machinery Systems, Inc.
 6. Wilkinson Company, Inc.

2.2 MATERIALS

- A. Zinc-Coated Steel Sheet: ASTM A653; G 90 zinc coating with chemical treatment, except mill phosphatized where indicated for painting or coating.
- B. Stainless Steel: Type 302/304, with manufacturer's standard directional polish or satin finish on exposed surfaces.
- C. Metal Coating: Manufacturer's standard baked synthetic enamel primer and finish coats, selected for resistance to damage or deterioration from exposure conditions.
- D. Casters: Caster manufacturer's heavy-duty steel casters with ball-bearing swivels and rubber tired wheels; of grade and size recommended by manufacturer for maximum possible weight supported, but not less than 6 inches in diameter.

2.3 WASTE COMPACTORS

- A. Provide manufacturer's standard packaged, prefabricated waste compactors, with selections as indicated to comply with requirements. Provide components that comply with manufacturer's published product literature, and as required for a complete functional system.
 1. Manufacturer: Kohlman Engineering
 2. Compactor Type: Container compactor.
 3. NSWMA Base Size: 0.52 cu. yd. (minimum).
 4. Chamber Opening: 26 inches wide by 24 inches long.
 5. Normal System Pressure: 124 psi.
 6. Maximum System Pressure: 155 psi.
 7. Normal/Maximum Packing Force: 21,000/26,500 psi.
 8. Ram Face: 19 inches wide by 12 inches high.
 9. Ram Stroke: 24 inches.

10. Normal Cycle Time: 23 seconds.
11. Motor Size: 5 hp.

2.4 FABRICATION

- A. Fabricate waste compactors with manufacturer's standard joints and seams, with exposed edges smoothed and eased. Fabricate compaction chambers, unit bodies, and similar components of steel plate with welded joints. Reinforce with structural steel members sized and spaced to withstand impacts and pressures of normal operations, and sufficient strength to prevent excessive long-term development of waves or valleys.
 1. Fabricate with replaceable parts at points of normal wear.
- B. Electrical Work: Provide materials, devices, and controls of type and quality recommended by NEMA for applications indicated. Refer to Division 16 sections for power characteristics and service to equipment units, including disconnect switches.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Prior to beginning installation, examine areas to receive waste compactors. Verify that critical dimensions are correct and that conditions are acceptable.
 1. Do not proceed until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Install compactors according to manufacturer's instructions.
- B. Set each compactor securely and accurately in place; plumb, level and properly aligned. Anchor as required for secure operation.
- C. Complete field assembly with joints as recommended by manufacturer. Grind welds smooth and restore finish. Comply with NECA Standards for electrical work.

3.3 DEMONSTRATION

- A. Startup Services: Provide the services of a factory-authorized service representative to provide startup service and to demonstrate and train the Owner's personnel as specified below.
 1. Test and adjust compactor controls and safety features. Replace damaged or malfunctioning controls and equipment. Make necessary adjustments for safe and proper operation of equipment.
 2. Instruct the Owner's operational personnel in proper use and maintenance of waste compactors. Demonstrate capacity ratings, safety features, cleaning procedures, and proper methods for storage and handling of raw and processed waste materials.
 3. Schedule training through CM with at least 7 days' advance notice.

END OF SECTION 11172